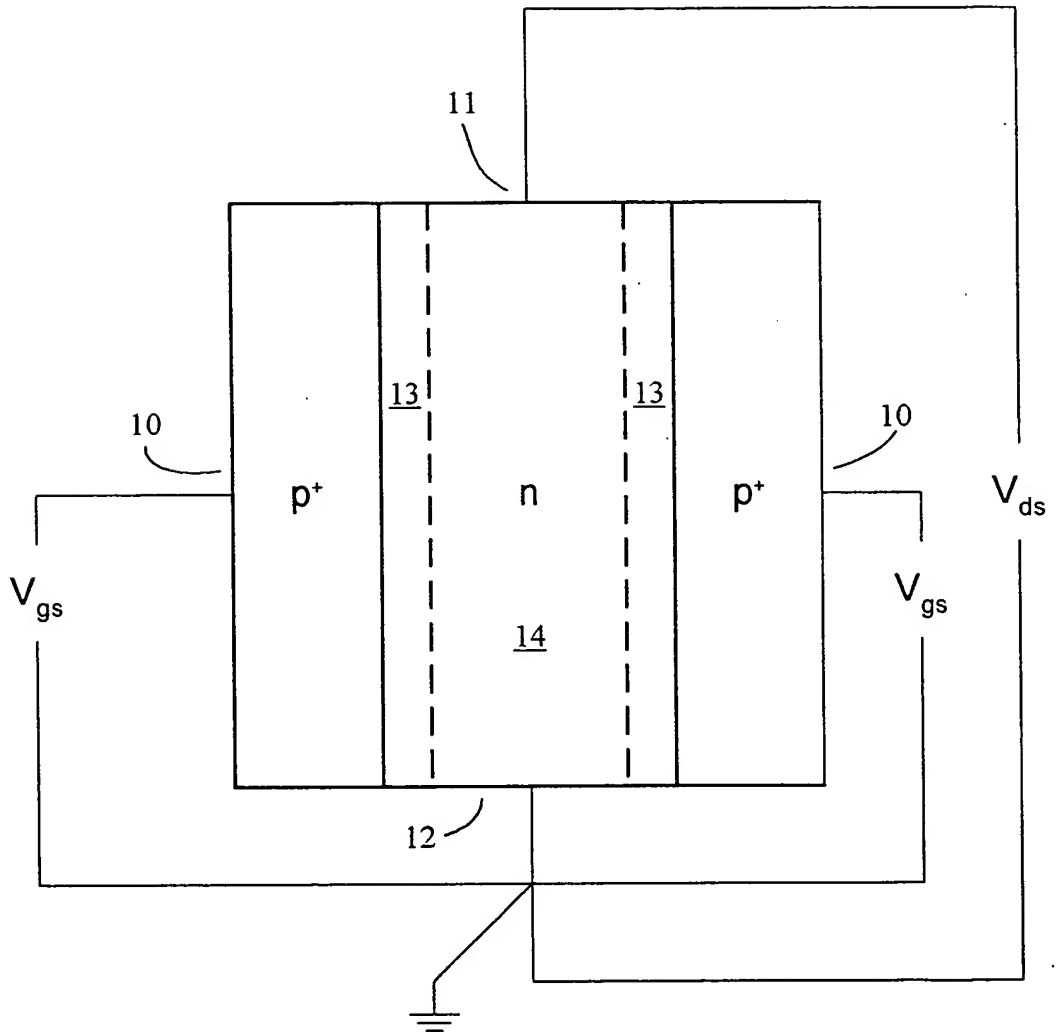

FIGURE 1A
(Prior Art)

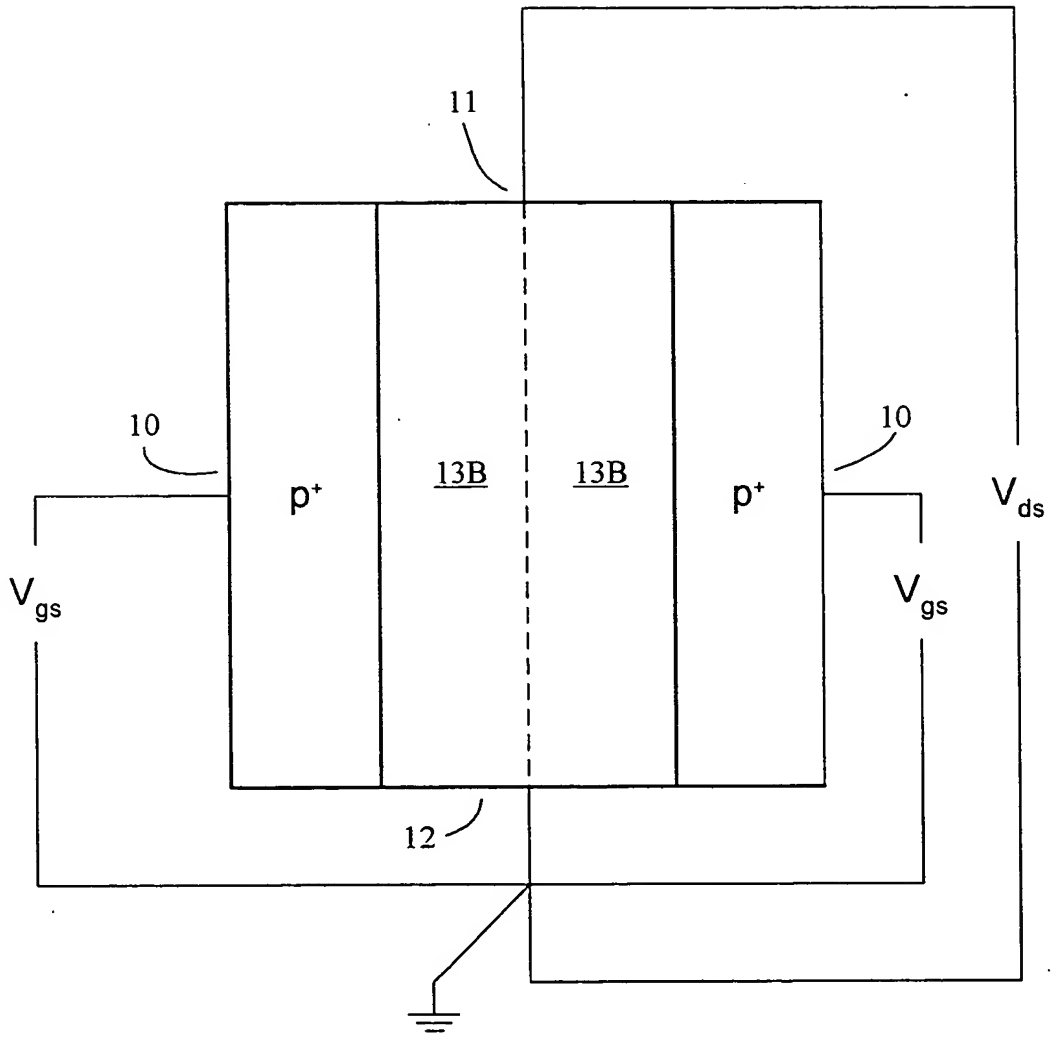

FIGURE 1B
(Prior Art)

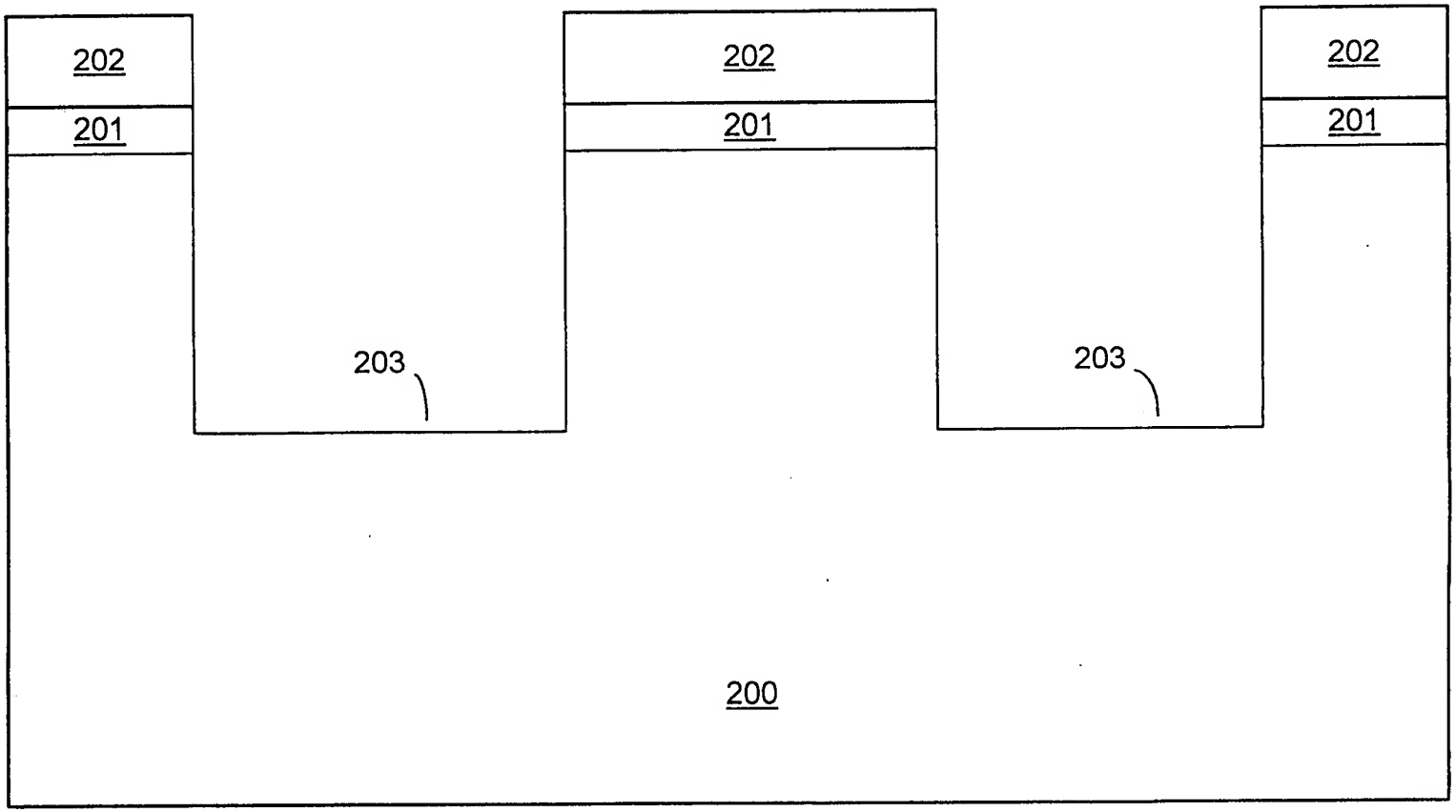

FIGURE 2A

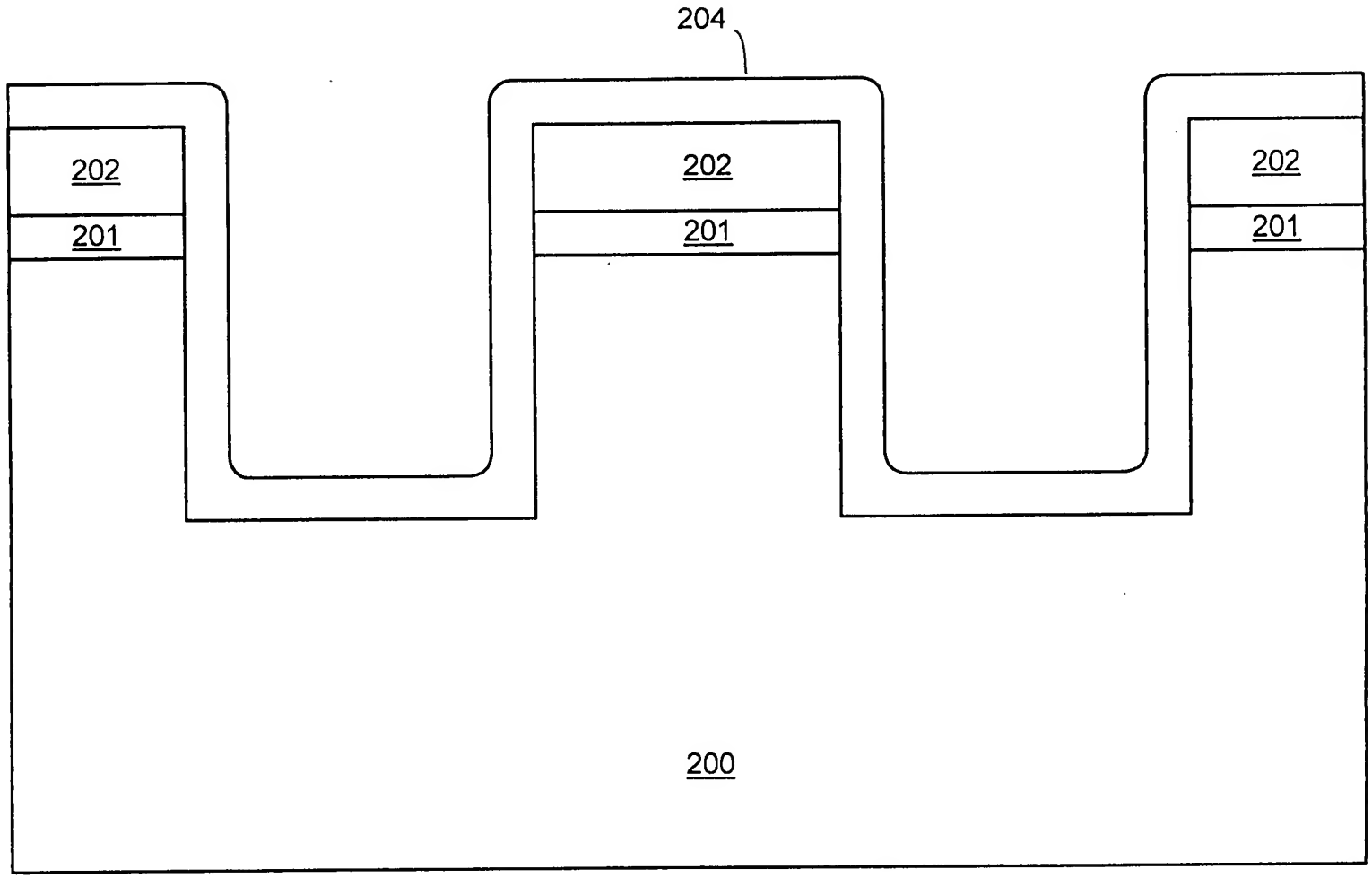

FIGURE 2B

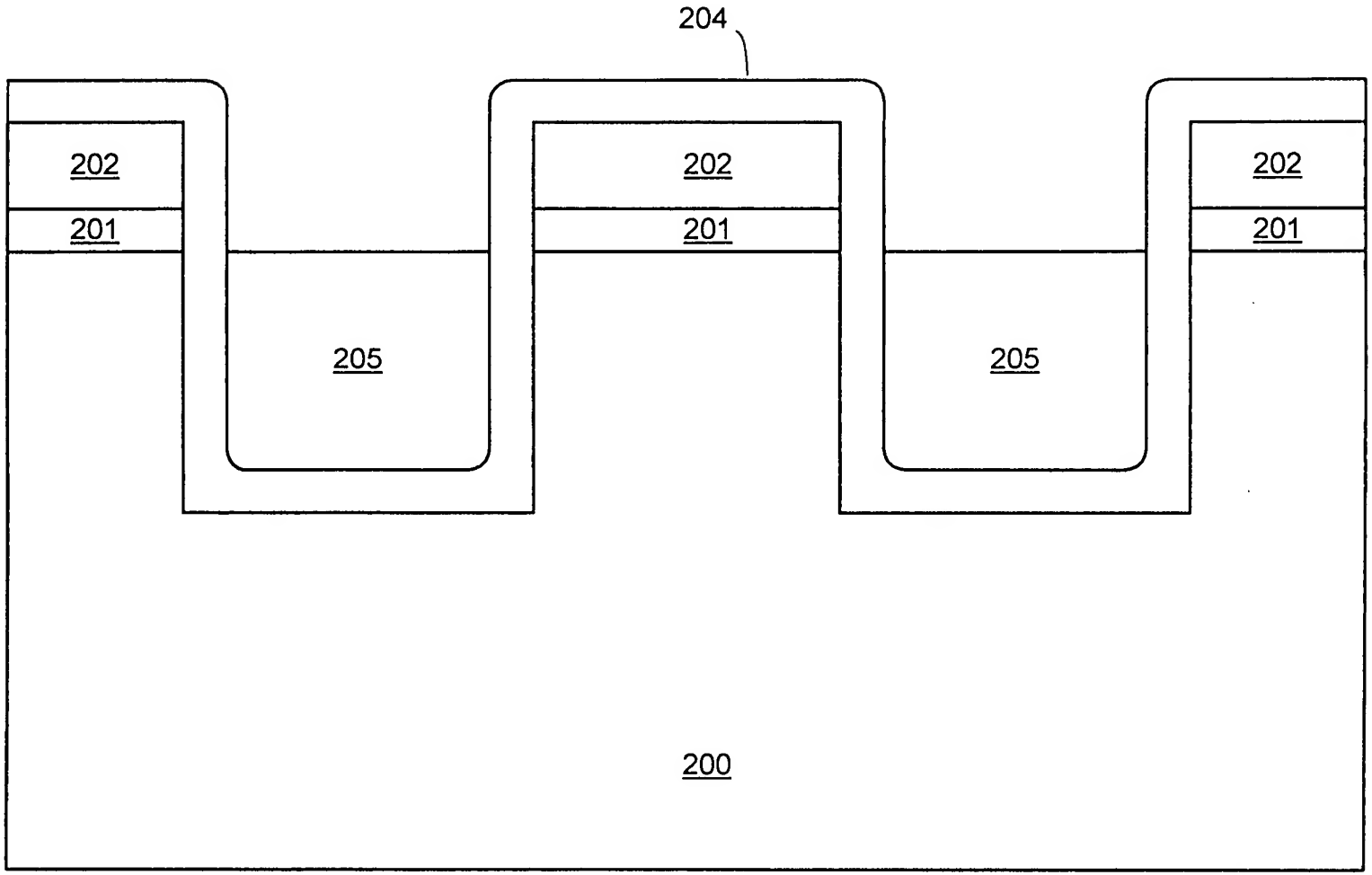

FIGURE 2C

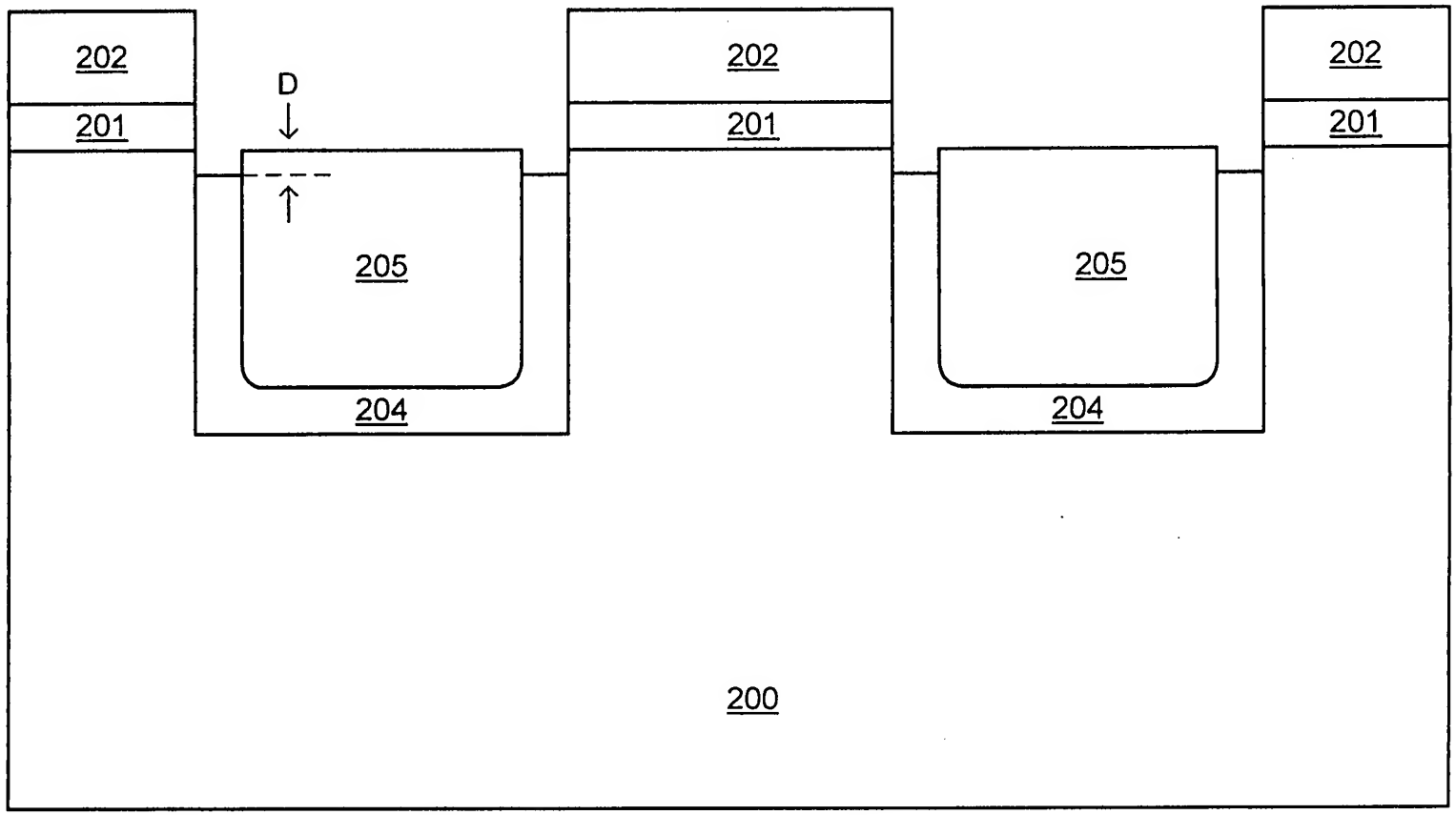

FIGURE 2D

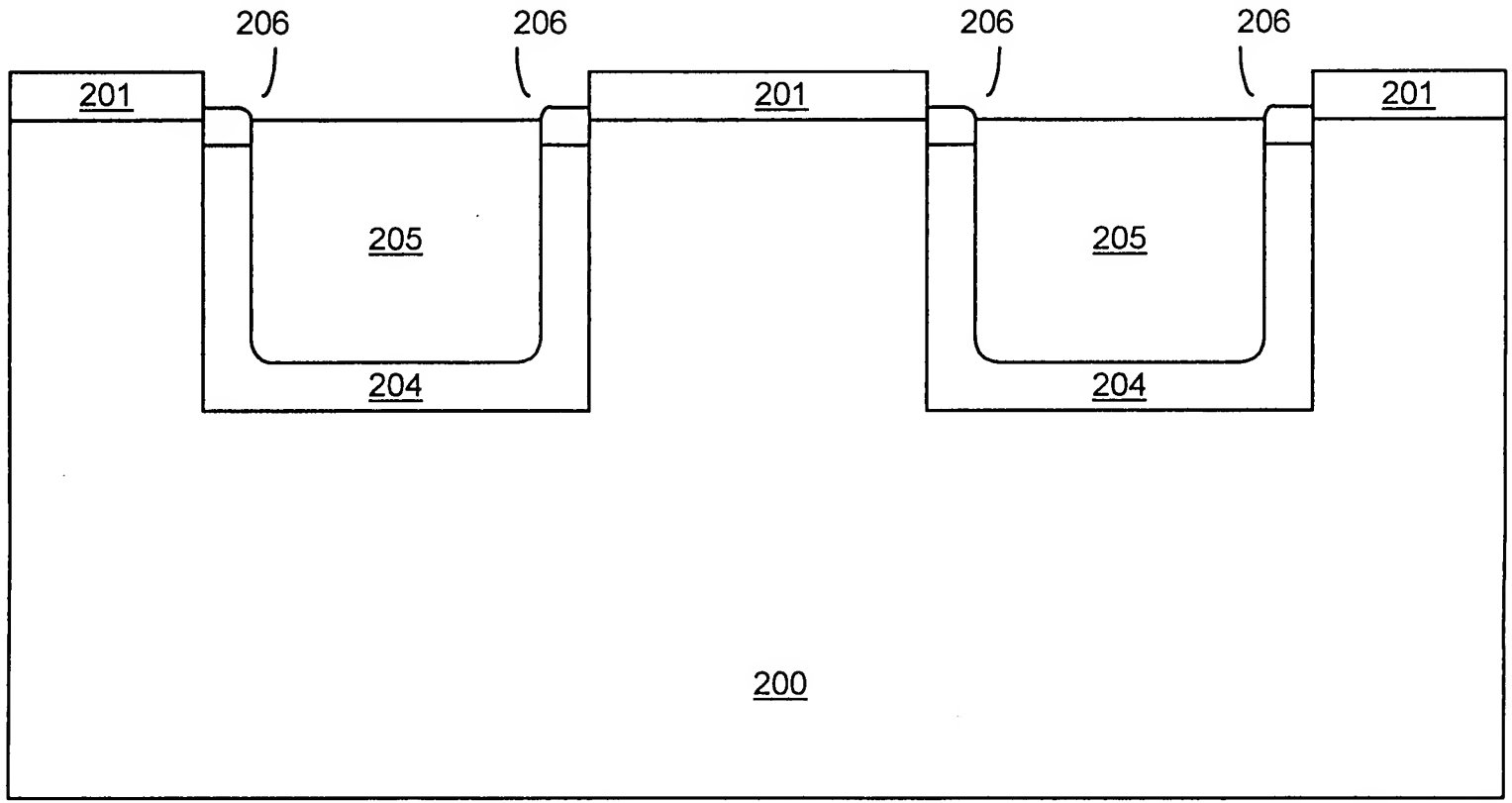

FIGURE 2E

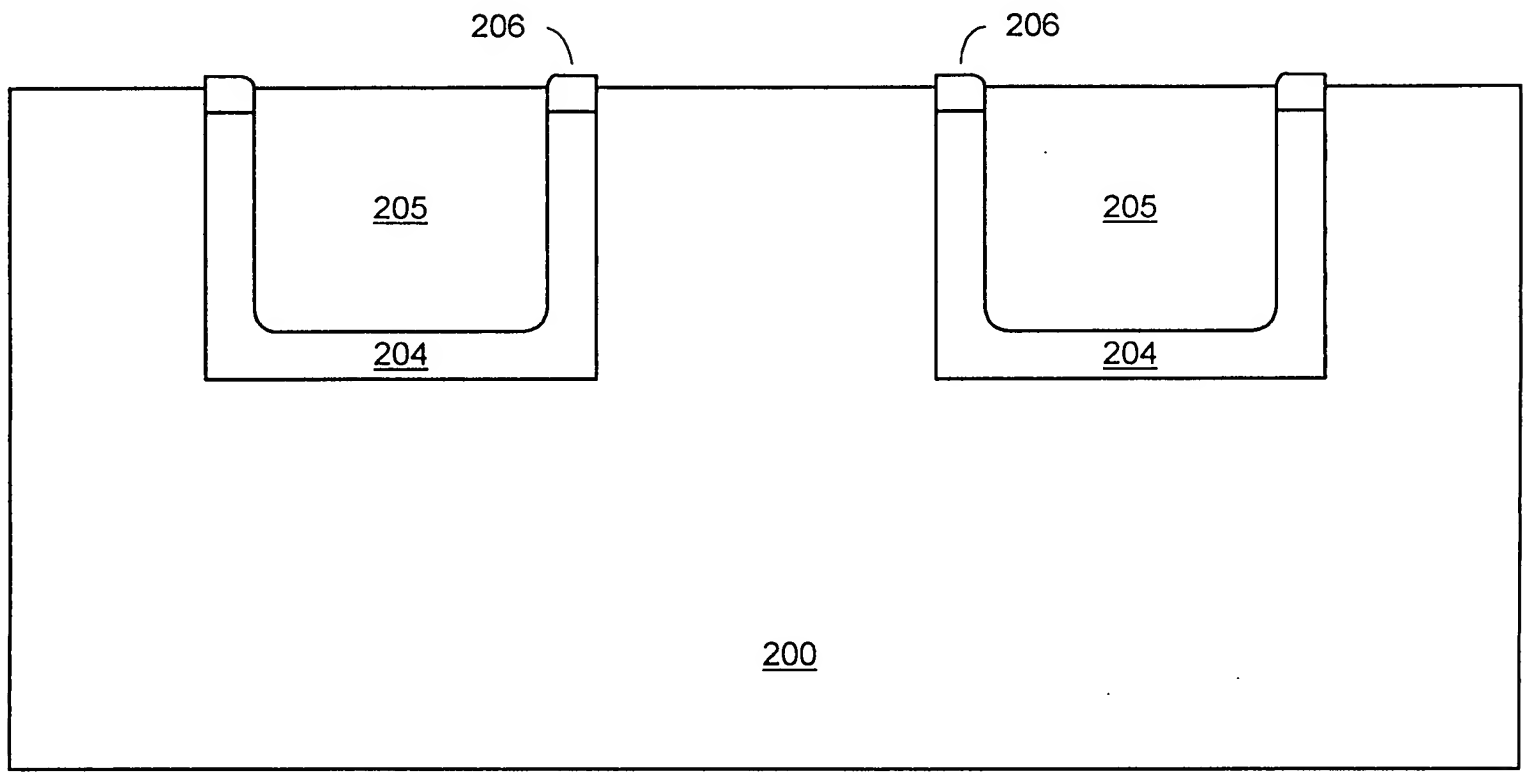

FIGURE 2F

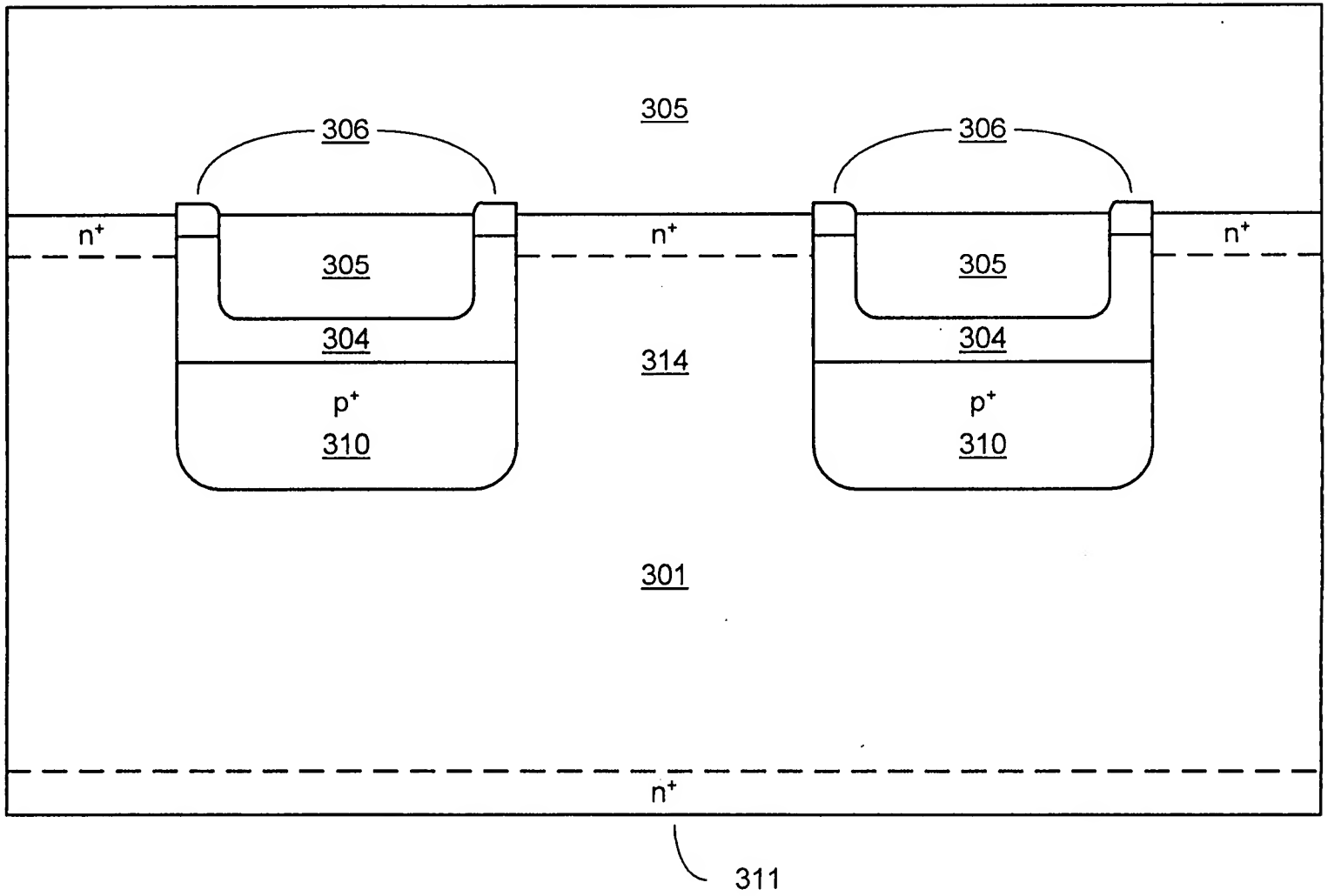

FIGURE 3

400

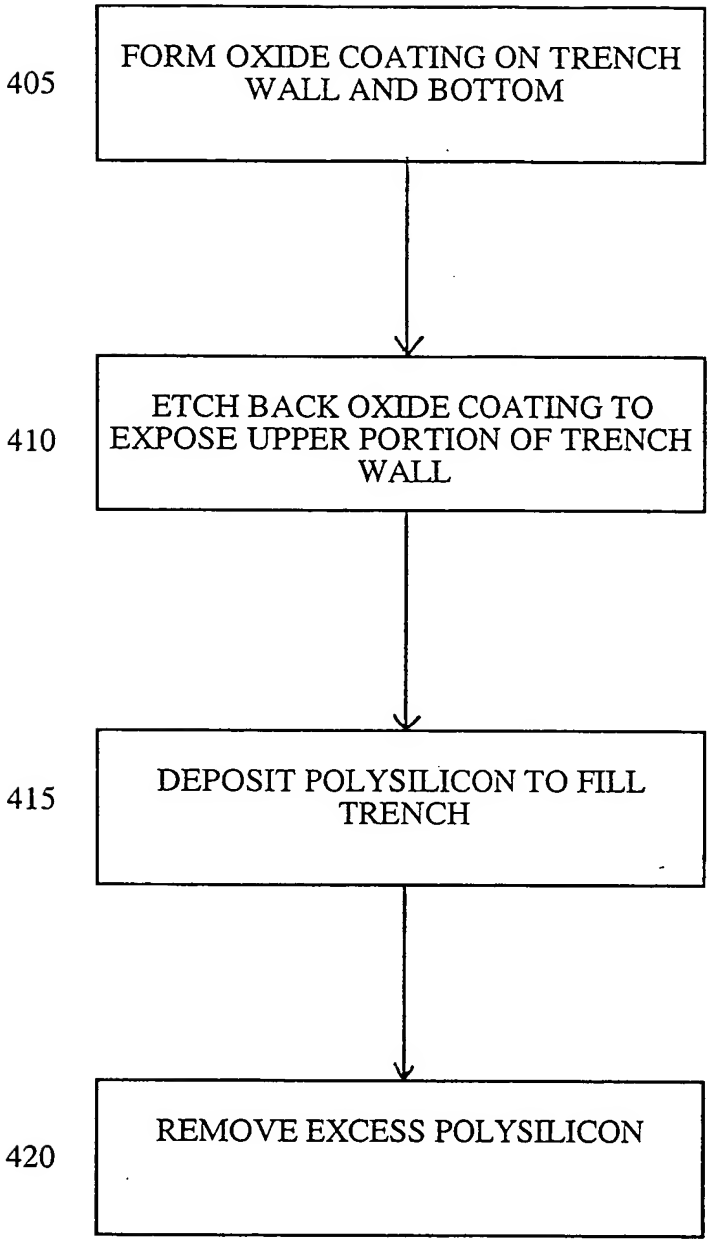
405
FORM OXIDE COATING ON TRENCH WALL AND BOTTOM
410
ETCH BACK OXIDE COATING TO EXPOSE UPPER PORTION OF TRENCH WALL
415
DEPOSIT POLYSILICON TO FILL TRENCH
420
REMOVE EXCESS POLYSILICON

FIGURE 4

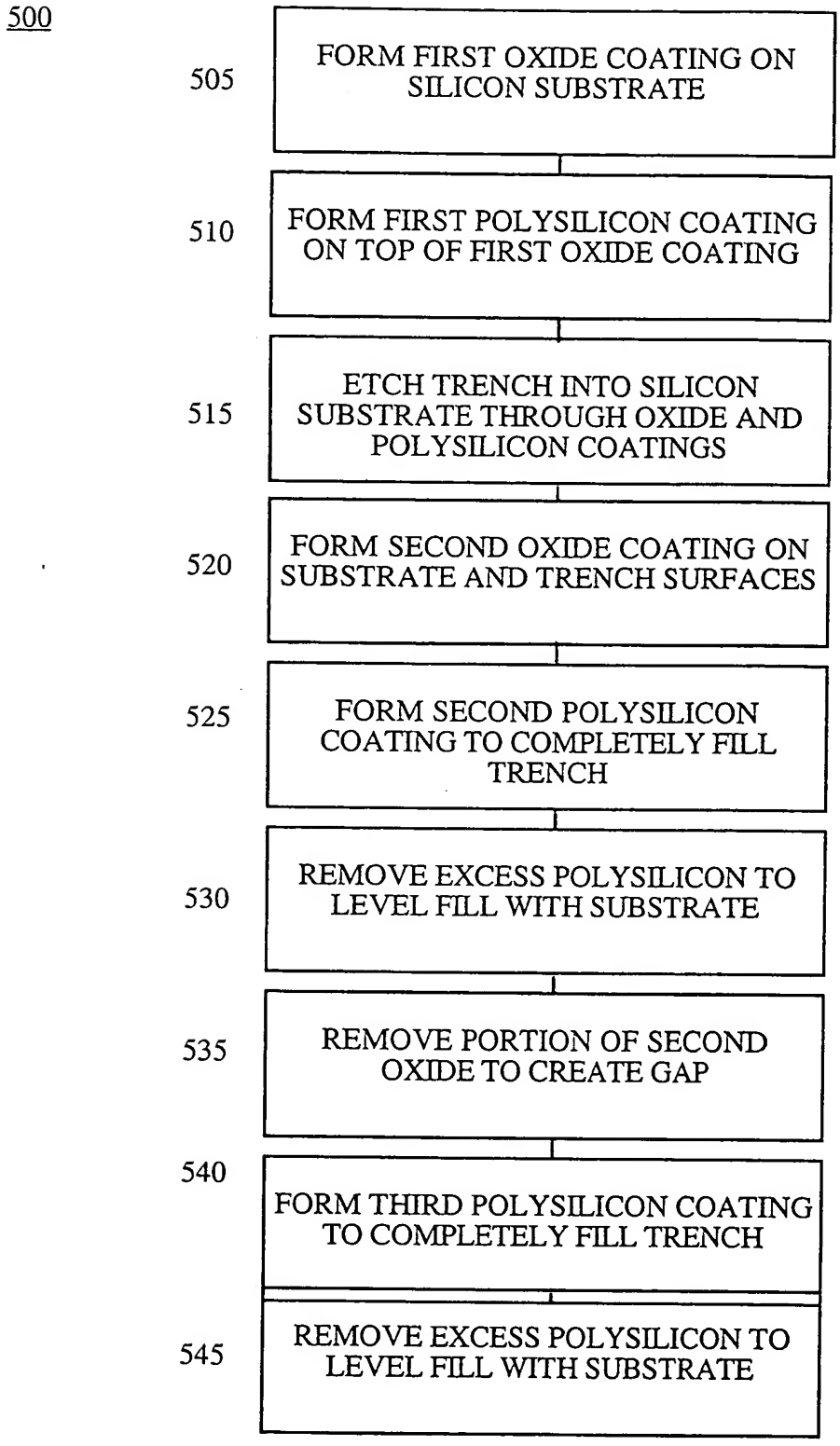
500
505
FORM FIRST OXIDE COATING ON SILICON SUBSTRATE
510
FORM FIRST POLYSILICON COATING ON TOP OF FIRST OXIDE COATING
515
ETCH TRENCH INTO SILICON SUBSTRATE THROUGH OXIDE AND POLYSILICON COATINGS
520
FORM SECOND OXIDE COATING ON SUBSTRATE AND TRENCH SURFACES
525
FORM SECOND POLYSILICON COATING TO COMPLETELY FILL TRENCH
530
REMOVE EXCESS POLYSILICON TO LEVEL FILL WITH SUBSTRATE
535
REMOVE PORTION OF SECOND OXIDE TO CREATE GAP
540
FORM THIRD POLYSILICON COATING TO COMPLETELY FILL TRENCH
545
REMOVE EXCESS POLYSILICON TO LEVEL FILL WITH SUBSTRATE

FIGURE 5